UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,097	09/15/2006	Christian Ohler	1004501-000862	7836
	7590 11/18/200 INGERSOLL & ROOI	EXAMINER		
POST OFFICE	BOX 1404	NGUYEN, HOANG M		
ALEXANDKIA	ALEXANDRIA, VA 22313-1404		ART UNIT	PAPER NUMBER
			3748	
			NOTIFICATION DATE	DELIVERY MODE
			11/18/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

		Application No.	Applicant(s)			
Office Action Summary		10/593,097	OHLER ET AL.			
		Examiner	Art Unit			
		Hoang M. Nguyen	3748			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on <u>10 Se</u>	antambar 2000				
-	This action is FINAL . 2b) This action is non-final.					
′—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٥/ك	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
	4)⊠ Claim(s) <u>1 and 3-10</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
· · · · · · · · · · · · · · · · · · ·	Claim(s) <u>1, 3-10</u> is/are rejected.					
	Claim(s) is/are rejected. Claim(s) is/are objected to.					
-	Claim(s) are subject to restriction and/or	r election requirement				
		oloculon requirement.				
	on Papers					
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) 🔲 Inforn	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P 6) Other:				

Applicant's amendment dated September 10, 2009, has been fully considered.

Page 2

Applicant has amended independent claims 1, 9, to eliminate the second heating means, and add a new limitation "first heat generating means generating heat from electrical energy supplied to the heat storage device, wherein said first heat generating means is contained within the heat storage device", and argued the applied references do not disclose that limitation. It's noted that concept is clearly taught by the secondary reference, US 5384489 (Bellac), which discloses an electric heater 34 inside a heat storage device 43.

Applicant argued it would not have been obvious to combine the references. The Examiner disagrees. All references are from the same field of endeavor. i.e., power systems having heat generating means and heat storage means. Therefore, it would have been obvious to modify one reference in view of the other to improve the efficiency of the system.

Applicant argue nowhere in his admitted prior art does Applicant disclose the heat storage means and heat generating means. The Examiner is very surprising about this argument. Applicant's admitted prior art includes the first seven lines of claim 1 (in form of Jepson claim) that clearly recites the heat storage means, heat transfer means and heat generating means.

For the reasons set forth above, a new ground of rejection has been made because of Applicant's amendment and this Office Action has been made FINAL.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 8-10, are rejected under 35 U.S.C. 102(b) as being anticipated by US 5384489 (Bellac).

Bellac is relied upon to disclose it's well known to use a heat resistor/resistance 34 with a switch means 15 to control the heat input to a thermal storage device 43, the heat transfer devices 44, 54, for transferring heat to drive a steam-powered turbinegenerator 64.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-10, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4942736 (Bronicki) in view of U.S. 5384489 (Bellac). Bronicki discloses a system having a thermal storage device (160 or the reservoirs 104, 114, can also be considered as thermal storage devices), turbines 120a, 120b for driving an electric

generator 130 to drive compressors 140 to warm up the thermal storage device 160, there are two heating means 102, 112, that are identical. Bronicki does not disclose the heat generating means is an electric heater inside a vessel. Bellac is relied upon to disclose it's well known to use a heat resistor/resistance 34 with a switch means 15 to control the heat input to a thermal storage device 43, the heat transfer devices 44, 54, for transferring heat to drive a steam-powered turbine-generator 64. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide an electric heater inside the thermal storage device of Bronicki as taught by Bellac for the purpose of achieving appropriate heat level.

Claims 1, 3-10, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted prior art (pages 1-2, and lines 1-7 of original claim 1 in form of Jepson claim) in view of U.S. 4942736 (Bronicki) and Bellac. Applicant's admitted prior art on pages 1-2 and especially lines 1-7 of original claim 1 discloses the system with a heat storage device, heat transfer means, first heat generating means for heating the storage device with electrical power. Applicant's admitted prior art does not disclose a second heat generating means, and a heat resistor/resistance for the thermal storage. Bronicki discloses a system having a thermal storage device (160 or the reservoirs 104, 114, can also be considered as thermal storage devices), turbines 120a, 120b for driving an electric generator 130 to drive compressors 140 to warm up the thermal storage device 160, there are two heating means 102, 112, that are identical. It would have been obvious at the time the invention was made to a person having ordinary skill

Art Unit: 3748

in the art to provide a second identical heat generating means in the system of Applicant's admitted prior art as taught by Bronicki for the purpose of supplementing the input power. Bellac is relied upon to disclose it's well known to use a heat resistor/resistance 34 with a switch means 15 to control the heat input to a thermal storage device 43. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a heat resistor with switch means in Applicant's admitted prior art as taught by Bellac for the purpose of providing a more accurate heating and control means.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/593,097 Page 6

Art Unit: 3748

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/ Primary Examiner, Art Unit 3748

> HOANG NGUYEN PRIMARY EXAMINER ART UNIT 3748

Hoang Minh Nguyen 11/17/2009